

# The Ecology and Evolution of Tritrophic Interaction Diversity

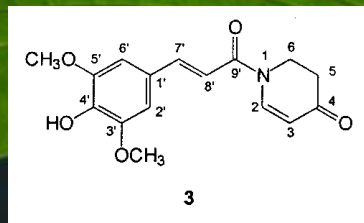


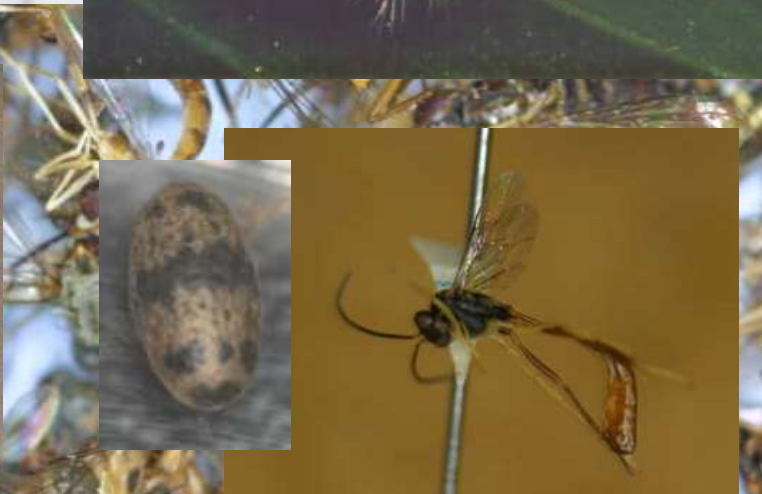
*Methocha* wasp injecting egg.



Lee Dyer  
Biology Department UNR

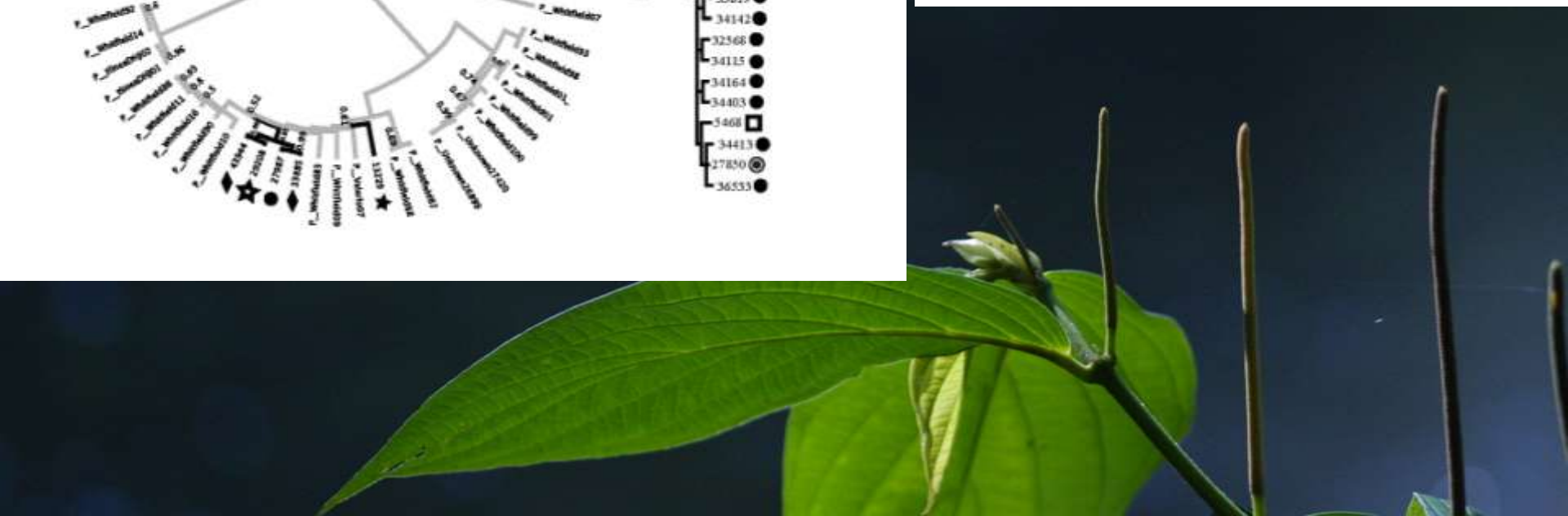
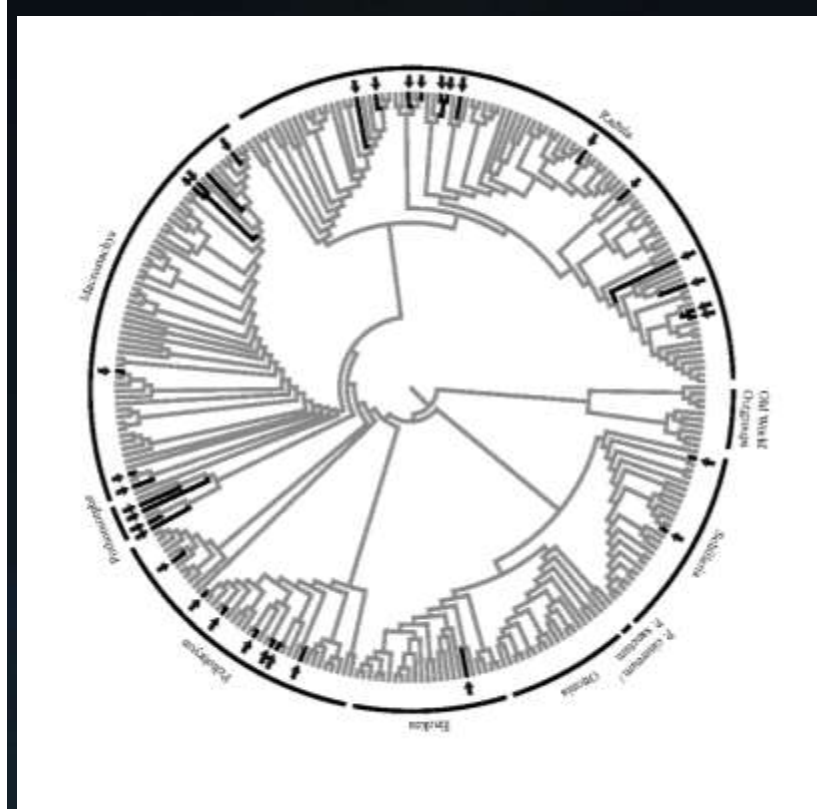
Email: [ldyer@unr.edu](mailto:ldyer@unr.edu)  
Web: [www.caterpillars.org](http://www.caterpillars.org)





*Ilatha* wasp injecting egg.





PERCENT PARASITISM



Braconidae



Ichneumonidae



Tachinidae

PHENOLOGICAL ASYNCHRONY

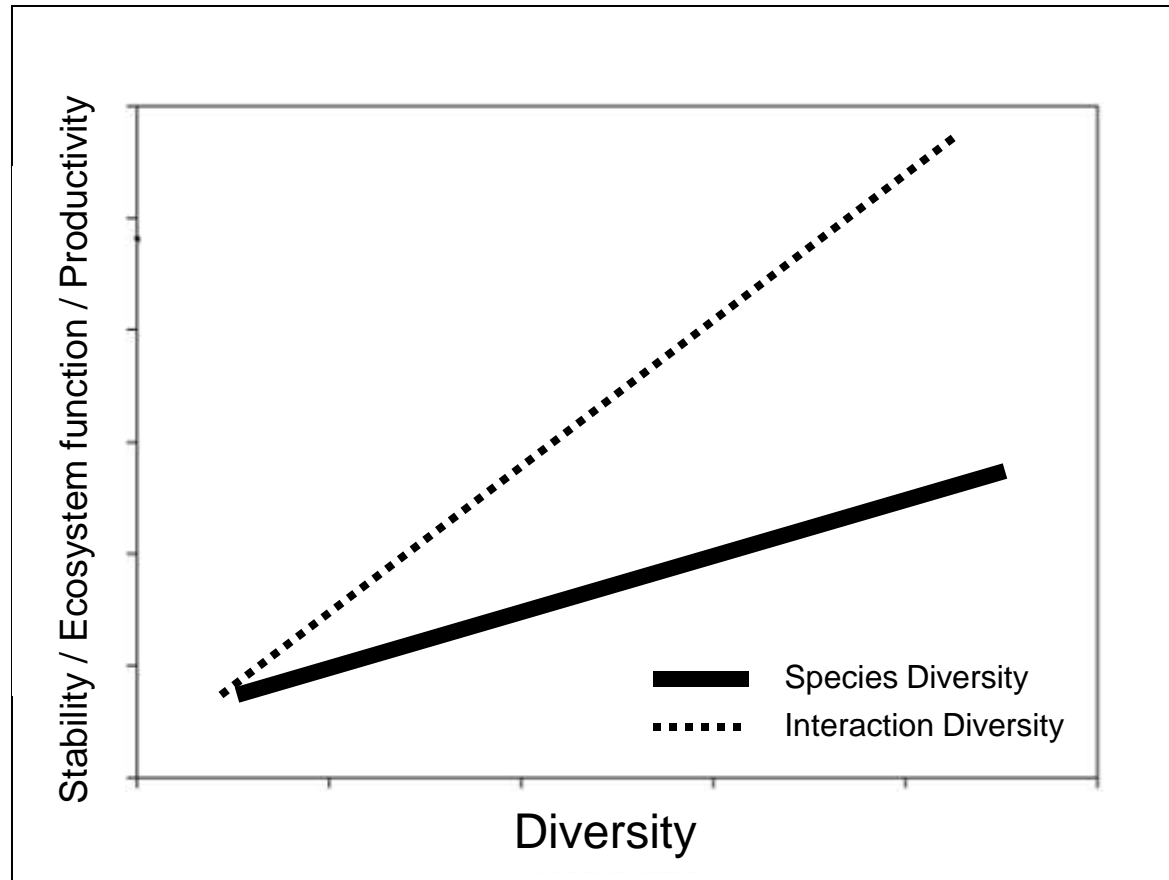




“Adaptation, specialization, coevolution, and the ecological outcomes that they generate all vary geographically and magnify the diversity of life over the number count of species... **Without the maintenance of this interaction biodiversity among species, the maintenance of species biodiversity itself becomes increasingly threatened.**”

Thompson. 1996. Evolutionary ecology and the conservation of biodiversity. 11:300-303



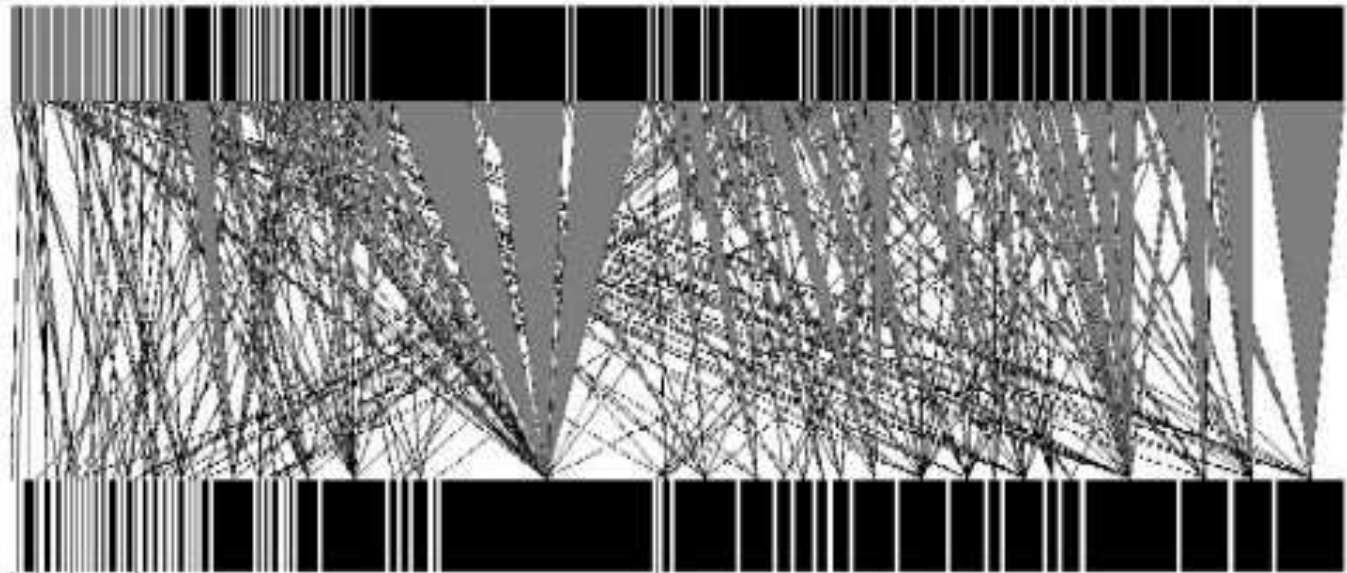


D

99  
PARASITOID  
SPECIES

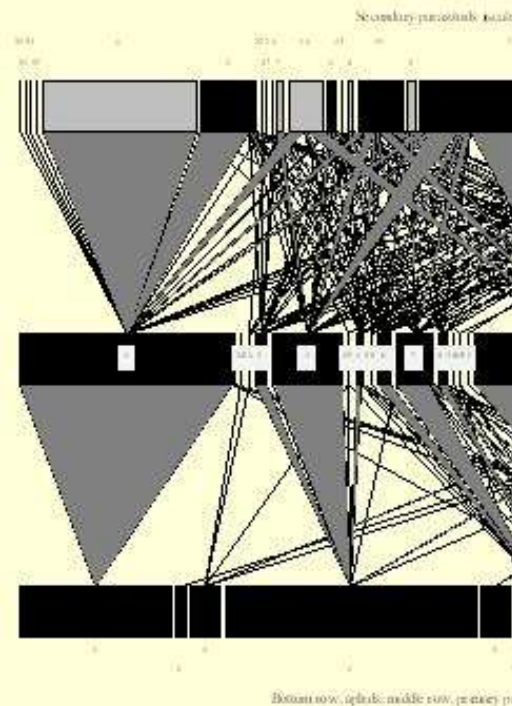


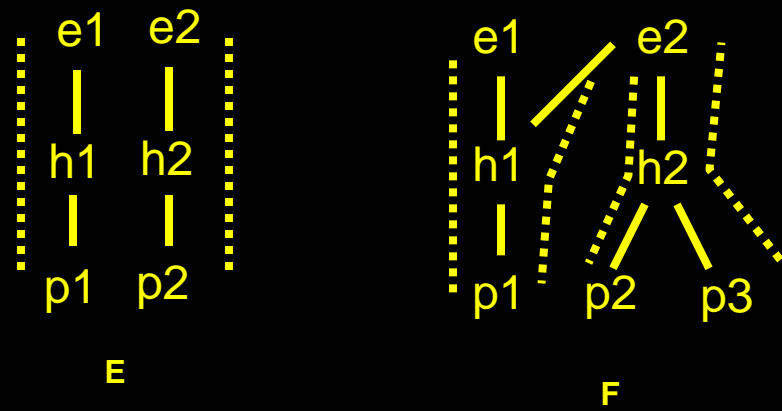
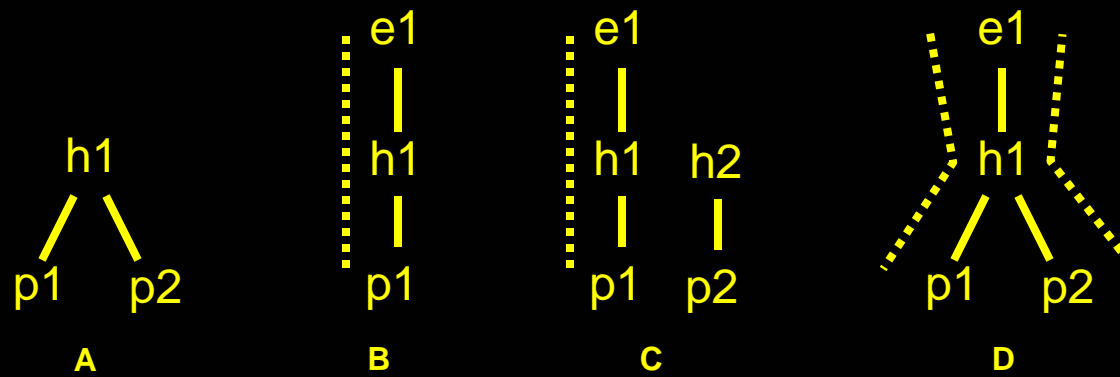
Scale: hosts x 0.6



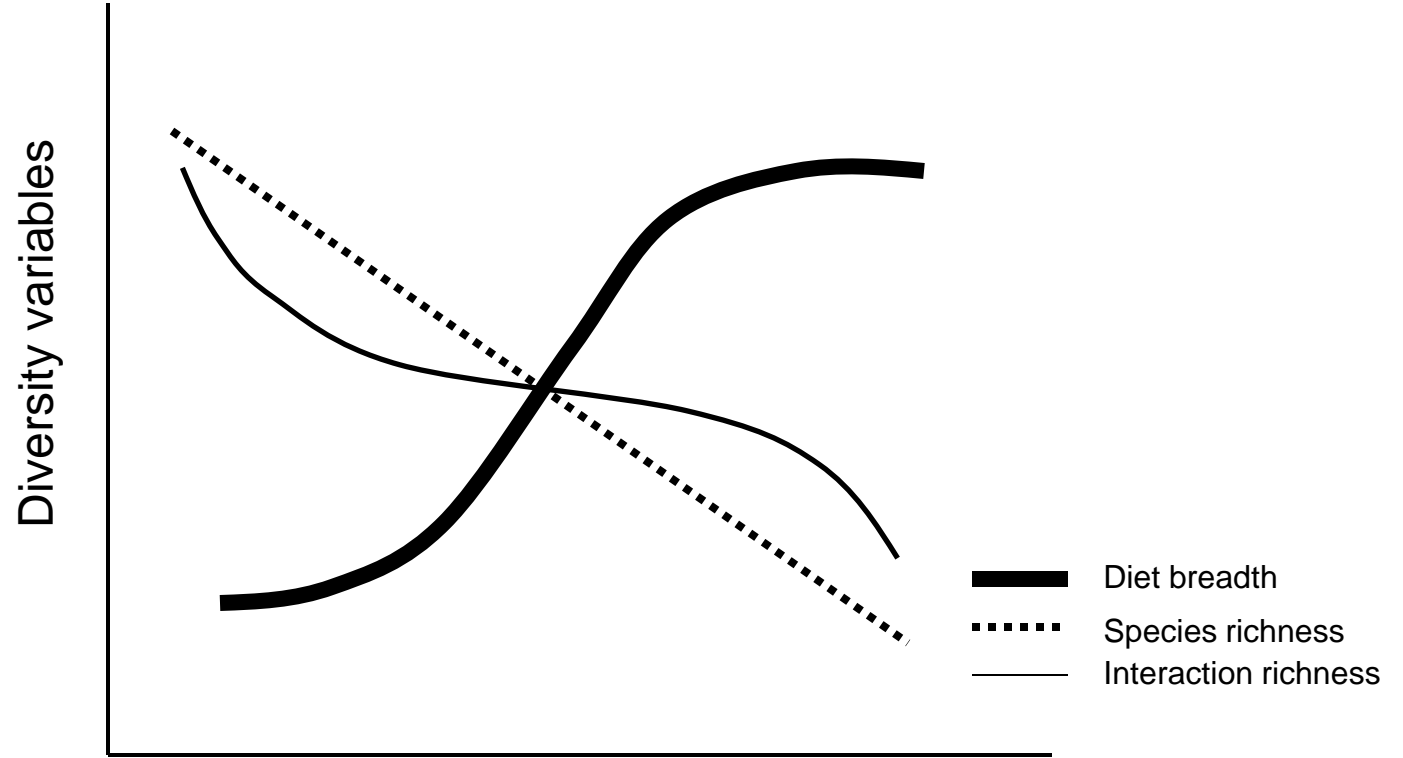
Total host density: 1.96m<sup>-2</sup>

93 HOST  
SPECIES









B

Latitude

# IMMATURE INSECTS



# ORUGAS





## **Familias de Lepidoptera**

**Oecophoridae**

**Gelechiidae**

**Choreutidae**

**Tortricidae**

**Pterophoridae**

**Hesperiidae**

**Papilionidae**

**Pieridae**

**Lycaenidae**

**Riodinidae**

**Nymphalidae**

**Megalopygidae**

**Limacodidae**

**Pyralidae**

**Thyrididae**

**Geometridae**

**Apatalodidae**

**Lasiocampidae**

**Saturniidae**

**Sphingidae**

**Notodontidae**

**Erebidae**

**(Arctiinae)**

**Noctuidae**

















